HEMATITE FUEL FABRICATION FACILITY, OFFICE
(Building No. 253)
3300 State Road P
Festus
Jefferson County
Missouri

HAER MO-113-J
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
National Park Service
U.S. Department of the Interior
1849 C Street NW
Washington, DC 20240-0001

HISTORIC AMERICAN ENGINEERING RECORD

HEMATITE FUEL FABRICATION FACILITY
BUILDING 253
(Office)

HAER No. MO-113-J

Location: 3300 State Road P
Festus, Jefferson County, Missouri

Present Owner: Westinghouse Electric Company Limited Liability Corporation (LLC)

Present Use: Abandoned: in process of deactivation for removal of hazardous substances, and preparation for decommissioning and demolition.

Significance: The Hematite Fuel Fabrication Facility, also known as Hematite Former Fuel Cycle Facility and the Westinghouse Electric Company Hematite Facility, was constructed over a period of thirty-one years. The Facility was the first privately owned and operated uranium fuel production plant in the United States. The plant produced nuclear fuel for military as well as peacetime purposes throughout the "Cold War."

The Hematite Fuel Fabrication Facility produced high-enriched nuclear fuel for the U.S. Navy nuclear submarine program and other reactor programs during the "Cold War" years of 1956 to 1974. After 1974 the Facility continued to produce only commercial grade low enriched uranium for commercial nuclear power facilities.

PART I. HISTORICAL INFORMATION

A. Physical History

1. **Date of Construction:** Circa 1976

2. **Architect:** The architect for this building is unknown.

3. **Owners, Occupants and Uses:** Owners include: Combustion Engineering Corporation, Asa Brown Boveri (ABB), and Westinghouse Electric Company, LLC. Building 253 has been used for offices, site utilities, uranium storage, processing area, and decontamination facilities.

4. **Builder-Contractor:** The contractor is unknown.

5. **Original Plans and Construction:** Location of original plans is unknown

6. **Alterations and Additions:** Building 253 was built to connect Building 240 on the west and Buildings 254 and 256 on the east. Building 250 and 251 were stand-alone buildings in 1975. Buildings 250 and 251 were encapsulated within Building 253 and are no longer commonly referred to as 250 and 251.

B. Historical Context

Building 253 was built around buildings 250 and 251 sometime after 1975. Historically Building 250 was divided into three rooms (250-1, 250-2, 250-3). Room 250-1 was used as storage for high-enrichment (UF6) cylinders. Room 250-2 was used as a general storage area and room 250-3 was a blending room for low-enriched oxide.

Building 251 was a warehouse for low enrichment fuel, but high-enriched fuel was moved through the warehouse.[1] Since the incorporation of buildings 250 and 251 into Building 253, the space has been used to house offices on the second floor and a

[1] James A. Rode, Deposition held at the law offices of Babst and Calland, Pittsburgh, Pennsylvania, November 13, 2001, 381.

decontamination area, the steam boiler, and storage for Special Nuclear Material (SNM).

PART II. ARCHITECTURAL INFORMATION

A. General Statement

1. **Architectural Character:** Modern industrial

2. **Condition of Fabric:** Good condition.

B. Description of Exterior

1. **Overall dimensions:** This building measures 77' x 130'-3", storage-26' x 26'-11", upstairs offices-77'x 48'-1". The ground level has 10,140 square feet and the upper level has 3,696 square feet for a total of 13,836 square feet.

2. **Foundation:** Concrete

3. **Walls:** Painted concrete block

4. **Structural system, framing:** Steel beam

5. **Porches:** There are no porches.

6. **Chimneys:** There are no chimneys.

7. **Openings:**

   a. **Doorways and Doors:** There are two overhead door, cargo bays on the east side of building. There are two exterior doors, one located on the east side of the building an on the north side of the building.

   b. **Windows:** There are six, asymmetrically positioned, one-over-one, single hung windows in the second floor, north side of building.

8. **Roof:**

   a. **Shape, covering:** Flat roof with metal sheathing over concrete

   b. **Cornice, eaves:** There are no cornices or eaves.

   c. **Dormers, cupolas, towers:** There are no dormers, cupolas, or towers.

C. **Description of Interior**

1. **Floor plans:** Building 253 is divided into three rooms, one main room with smaller rooms on the north and south, and smaller ancillary rooms on the east side. All of the rooms can be accessed one to the other from the interior. The second floor has offices around the perimeter and cubicles in the center. The first floor rooms have ingress/egress into Building 240 on the west and 254 on the east.

2. **Stairways:** There are two stairways leading to the offices on the second floor.

3. **Flooring:** Concrete slab

4. **Wall and ceiling finish:** Painted concrete block walls and exposed steel framing at the ceiling

5. **Openings:** Double doors enter into Buildings 240, 254, and 256.

6. **Decorative features:** There are no decorative features.

7. **Hardware:** Modern industrial hardware.

8. **Mechanical equipment:**

   a. **Heating, air conditioning, ventilation:** Modern heating and cooling system

b. **Lighting:** Fluorescent

c. **Plumbing:** There is plumbing.

D. **Site**

1. **General setting and orientation:** Building 253 faces State Road P on the north and connects to Building 240 on the west, 254 on the east and exits the building on the south.

2. **Historic landscape design:** There is no landscape design.

PART III. SOURCES OF INFORMATION

A. **Architectural drawings:** The original plans are currently held by Westinghouse Electric Company Limited Liability Corporation (LLC).

B. **Bibliography:**

Malich, Phillip J. *034-JE-02 Proposed Hematite Former Fuel Processing Facility*. Missouri Department of Natural Resources, State Historic Preservation Office, Jefferson City, Missouri, 2002.

Rode, James A. Deposition. November 13, 2001, in Westinghouse Electric Company LLC v US and etal. Case no.4:2003cv00861. Deposition held at the law offices of Babst and Calland, Pittsburgh, Pennsylvania.

PART IV. PROJECT INFORMATION

This Historic American Engineering Record (HAER) documentation project was undertaken due to the owner's desire to decommission the Facility. The Facility will be disassembled (this is being done for safety purposes and the work is being done in accordance with federal law and regulations regarding hazardous waste clean-up and disposal). In 2003, Westinghouse Electric Company, LLC, hired SCI Engineering, Inc., of St. Charles, Missouri, to complete the HAER documentation of the Hematite Fuel Fabrication Facility. Dr. Steve Dasovich supervised the project and Historian Colleen Small-Vollman authored the HAER documentation report. The report was compiled by Susan Sheppard. Bruce Meyer and Todd Kapler completed the photographic

documentation of the Facility, and Asa Westphal completed the floor plan drawings.